Venkatesan Jambunathan

List of Publications by Year
in descending order

78 papers	853 citations	516215 16 h-index	525886 27 g-index
78 all docs	78 docs citations	78 times ranked	616 citing authors

#	Article	IF	Citations
1	Spectroscopic characterization of Yb3+-doped laser materials at cryogenic temperatures. Applied Physics B: Lasers and Optics, 2014, 116, 75-81.	1.1	70
2	Status of the High Average Power Diode-Pumped Solid State Laser Development at HiLASE. Applied Sciences (Switzerland), 2015, 5, 637-665.	1.3	65
3	High-Contrast, High-Intensity Petawatt-Class Laser and Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 232-249.	1.9	60
4	Microchip Yb:CaLnAlO_4 lasers with up to 91% slope efficiency. Optics Letters, 2017, 42, 2431.	1.7	57
5	Overview of the HiLASE project: high average power pulsed DPSSL systems for research and industry. High Power Laser Science and Engineering, 2014, 2, .	2.0	43
6	Highly Efficient, Compact Tm3+:RE2O3 (RE = Y, Lu, Sc) Sesquioxide Lasers Based on Thermal Guiding. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-13.	1.9	40
7	Microchip laser operation of Yb-doped gallium garnets. Optical Materials Express, 2016, 6, 46.	1.6	31
8	Growth, spectroscopy and laser operation of Ho:KY(WO 4) 2. Journal of Luminescence, 2016, 179, 50-58.	1.5	26
9	Spectroscopic investigations of thulium doped YAG and YAP crystals between 77â€¯K and 300â€¯K for short-wavelength infrared lasers. Journal of Luminescence, 2018, 202, 427-437.	1.5	26
10	CW lasing of Ho in KLu(WO_4)_2 in-band pumped by a diode-pumped Tm:KLu(WO_4)_2 laser. Optics Express, 2010, 18, 20793.	1.7	24
11	Continuous-wave laser generation at ~21 Âµm in Ho:KRE(WO_4)_2 (RE = Y, Gd, Lu) crystals: a comparative study. Optics Express, 2011, 19, 25279.	1.7	23
12	Continuous-wave co-lasing in a monoclinic co-doped (Ho,Tm):KLu(WO4)2 crystal. Laser Physics Letters, 2011, 8, 799-803.	0.6	21
13	Investigations on Ferroelectric PZT-PVDF Composites of 0â€“3 Connectivity. Ferroelectrics, 2005, 325, 121-130.	0.3	20
14	Spectroscopic and lasing characteristics of Yb:YGAG ceramic at cryogenic temperatures. Optical Materials Express, 2015, 5, 1289.	1.6	19
15	Diode-Pumped Ho-Doped KLu(WO₄)₂Laser at 2.08 Âµm. Applied Physics Express, 2011, 4, 072601.	1.1	17
16	Crystal growth, optical spectroscopy, and continuous-wave laser operation of co-doped (Ho,Tm):KLu(WO_4)_2 monoclinic crystals. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1415.	0.9	17
17	Design of a kJ-class HiLASE laser as a driver for inertial fusion energy. High Power Laser Science and Engineering, 2014, 2, .	2.0	15
18	Crystal growth, optical spectroscopy, and continuous-wave laser operation of Ho:KLu(WO4)2 crystals. Applied Physics B: Lasers and Optics, 2014, 116, 455-466.	1.1	15

#	Article	IF	Citations
19	Graphene Q-Switched Compact Yb:YAG Laser. IEEE Photonics Journal, 2015, 7, 1-7.	1.0	15
20	Efficient laser performance of a cryogenic Yb:YAG laser pumped by fiber coupled 940 and 969â€‰nm laser diodes. Laser Physics Letters, 2015, 12, 015002.	0.6	15
21	Near-infrared photoluminescence from Ho3+-doped monoclinic KLu(WO4)2 crystal codoped with Tm3+. Journal of Luminescence, 2009, 129, 1882-1885.	1.5	14
22	Cryogenic Yb:YAG Laser Pumped by VBG-Stabilized Narrowband Laser Diode at 969 nm. IEEE Photonics Technology Letters, 2016, 28, 1328-1331.	1.3	14
23	Passive Q-switching of a Tm,Ho:KLu(WO_4)_2 microchip laser by a Cr:ZnS saturable absorber. Applied Optics, 2016, 55, 3757.	2.1	14
24	Overview of ytterbium based transparent ceramics for diode pumped high energy solid-state lasers. High Power Laser Science and Engineering, 2018, 6, .	2.0	14
25	Spectroscopic characterization of various Yb³⁺doped laser materials at cryogenic temperatures for the development of high energy class diode pumped solid state lasers. Proceedings of SPIE, 2013, , .	0.8	13
26	Comparative LIDT measurements of optical components for high-energy HiLASE lasers. High Power Laser Science and Engineering, 2016, 4, .	2.0	11
27	Q-switching of a Tm,Ho:KLu(WO4)2microchip laser by a graphene-based saturable absorber. Laser Physics Letters, 2016, 13, 025801.	0.6	10
28	Spectroscopy and diode-pumped continuous-wave laser operation of Tm:Y2O3 transparent ceramic at cryogenic temperatures. Applied Physics B: Lasers and Optics, 2020, 126, 1.	1.1	10
29	Crystal growth, low-temperature spectroscopy and multi-watt laser operation of Yb:Ca3NbGa3Si2O14. Journal of Luminescence, 2018, 197, 90-97.	1.5	9
30	Fs-laser-written erbium-doped double tungstate waveguide laser. Optics Express, 2018, 26, 30826.	1.7	9
31	Control of the cool/warm white light generation from lanthanide ions in monoclinic double tungstate crystals. Journal of Luminescence, 2011, 131, 2212-2215.	1.5	8
32	Laser performances of diode pumped Yb:Lu₂O₃ transparent ceramic at cryogenic temperatures. Optical Materials Express, 2019, 9, 4669.	1.6	8
33	HiLASE cryogenically-cooled diode-pumped laser prototype for inertial fusion energy. Proceedings of SPIE, 2013, , .	0.8	7
34	Efficient diode pumped Yb:Y2O3 cryogenic laser. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	7
35	Diode-pumped, electro-optically<i>Q</i>-switched, cryogenic Tm:YAG laser operating at 1.88 Î¼m. High Power Laser Science and Engineering, 2021, 9, .	2.0	7
36	Growth and spectroscopy of (Ho,Yb):KLu(WO<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 87 Td (xmlns:mml="http://www.w3.org/ xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:	1.2	6

#	Article	IF	Citations
37	Diode-pumped continuous-wave laser operation of co-doped (Ho,Tm):KLu(WO4)2 monoclinic crystal. Optics and Laser Technology, 2013, 54, 326-328.	2.2	6
38	Cryogenically-cooled Yb:YGAG ceramic mode-locked laser. Optics Express, 2016, 24, 1402.	1.7	6
39	Efficient diode-pumped Er:KLu(WO_4)_2 laser at â^¼161â€‰â€‰Î¼m. Optics Letters, 2018, 43, 218.	1.7	6
40	Diode pumped cryogenic Yb:Lu3Al5O12 laser in continuous-wave and pulsed regime. Optics and Laser Technology, 2021, 135, 106720.	2.2	6
41	Spectroscopy and diode-pumped laser operation of transparent Tm:Lu₃Al₅O₁₂ ceramics produced by solid-state sintering. Optics Express, 2020, 28, 28399.	1.7	6
42	Optimization of dopant concentration in Ho:KLu(WO4)2laser achieving â^¼70% slope efficiency. Laser Physics, 2013, 23, 125801.	0.6	5
43	Effect of Gd3+/Ga3+ on Yb3+ emission in mixed YAG at cryogenic temperature. Ceramics International, 2019, 45, 9418-9422.	2.3	5
44	Monoclinic zinc monotungstate Yb3+,Li+:ZnWO4: Part II. Polarized spectroscopy and laser operation. Journal of Luminescence, 2021, 231, 117811.	1.5	5
45	Time-resolved measurement of thermally induced aberrations in a cryogenically cooled Yb:YAG slab with a wavefront sensor. Applied Physics B: Lasers and Optics, 2016, 122, 1.	1.1	4
46	Diode pumped compact cryogenic Yb:YAG/Cr:YAG pulsed laser. Proceedings of SPIE, 2016, , .	0.8	4
47	Continuous-wave and passively Q-switched cryogenic Yb:KLu(WO_4)_2 laser. Optics Express, 2017, 25, 25886.	1.7	4
48	Diode-pumped master oscillator power amplifier system based on cryogenically cooled Tm:Y2O3 transparent ceramics. Optical Materials Express, 2021, 11, 1489.	1.6	4
49	Temperature dependent absorption measurement of various transition metal doped laser materials. Proceedings of SPIE, 2015, , .	0.8	2
50	Wavelength tunability of laser based on Yb-doped YGAG ceramics. , 2015, , .		2
51	Passive Q switching of Yb:CNGS lasers by Cr⁴⁺:YAG and V³⁺:YAG saturable absorbers. Applied Optics, 2018, 57, 8236.	0.9	2
52	High-energy picosecond light source based on cryogenically conduction cooled Yb-doped laser amplifier. Proceedings of SPIE, 2014, , .	0.8	1
53	HiLASE: development of fully diode pumped disk lasers with high average power. , 2015, , .		1
54	HiLASE: a scalable option for Laser Inertial Fusion Energy. Journal of Physics: Conference Series, 2016, 688, 012060.	0.3	1

#	Article	IF	Citations
55	Temperature dependent spectroscopic characterization of Tm:YAG crystals as potential laser medium for pulsed high energy laser amplifiers. , 2017, , .		1
56	Diode-pumped cryogenic Tm:LiYF4 laser. , 2019, , .		1
57	Development of high average and peak power laser around 2 Î¼m based on cryogenically cooled Tm:Y2O3 transparent ceramic. , 2020, , .		1
58	2.08 µm Ho:KLu(WO<inf>4</inf>)<inf>2</inf> laser resonantly pumped by a diode laser. , 2011, , .		0
59	Simultaneous Dual-Wavelength Laser Operation in Co-Doped (Ho,Tm):KLu(WO4)2 Crystal. , 2011, , .		0
60	Ho:KRE(WO4)2, RE=(Y, Gd, Lu), CW laser performance near 2.1 micron under resonant pumping by a Tm:KLu(WO4)2 laser. Proceedings of SPIE, 2012, , .	0.8	0
61	Ho³⁺ lasing at 2060 nm in Co-doped Tm, Ho:KLu(WO<inf>4</inf>)<inf>2</inf>. , 2013, , .		0
62	Design of kJ-class HiLASE laser as a driver for inertial fusion energy â€“ CORRIGENDUM. High Power Laser Science and Engineering, 2014, 2, .	2.0	0
63	Cryogenic laser performance of Yb:YAG diode-pumped at 940 nm and 969 nm for high power lasers. , 2014, , .		0
64	Recent progress on an upgrade of the J-KAREN laser at JAEA. , 2015, , .		0
65	Development of a closed-loop cryogenically cooled sub-picosecond regenerative amplifier. , 2015, , .		0
66	Recent Advances on the J-KAREN laser upgrade. , 2015, , .		0
67	Zero-phonon-line pumped cryogenic Yb:YAG passively Q-switched by Cr:YAG. Proceedings of SPIE, 2016, , .	0.8	0
68	Diode-pumped cryogenic Yb:KLu(WO<inf>4</inf>)<inf>2</inf> laser. , 2017, , .		0
69	Cryogenic Yb:YGAG ceramic laser pumped at 940 nm and zero-phonon-line: a comparative study. Optical Materials Express, 2017, 7, 477.	1.6	0
70	Diode â€” Pumped Efficient Cryogenic Yb:Y2O3 Transparent Ceramic Laser. , 2019, , .		0
71	Spectroscopy, Continuous-Wave and Passively Q-Switched Laser Operation of Transparent Tm:LuAG Ceramics. , 2019, , .		0
72	Spectroscopy of Tm:Y2O3 Transparent Ceramic at Cryogenic Temperatures. , 2019, , .		0

#	Article	IF	Citations
73	2 Î¼m MOPA Laser Based on Cryogenically Cooled Tm:Y2O3 Transparent Ceramic. , 2021, , .		0
74	Continuous-wave lasing of monoclinic Ho:KLu(WO4)2 under in-band excitation by a diode-pumped Tm:KLu(WO4)2 laser. , 2010, , .		0
75	Microchip Laser Operation of Yb-Doped Gallium Garnets. , 2015, , .		0
76	Status and Development of High Average Power Lasers at HiLASE. , 2018, , .		0
77	Synthesis, Spectroscopy and Efficient Laser Operation of Tm:Lu3Al5O12 Transparent Ceramics. , 2019, , .		0
78	Multi-watt continuous-wave and passively Q-switched Tm:CaYAlO4 micro-lasers. , 2020, , .		0